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Media Advisory

TARDEC

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TARDEC Director Addresses University of Michigan Robotics and Autonomous Technologies Conference

ANN ARBOR, MI ─ A century ago, Southeastern Michigan manufacturers put the nation in automobiles and revolutionized the field of ground vehicle engineering. Today, Michigan's burgeoning robotics industry is "changing how work gets done," exclaimed University of Michigan Engineering Dean David C. Munson Jr.

Munson welcomed a standing-room only crowd of nearly 200 attendees to the Aug. 11 Michigan Robotics and Autonomous Technologies Conference. The University of Michigan recently opened its Ground Robotics Research Center (GRRC) and is offering a master's degree in robotics for the first time this fall to prepare future engineers for careers in the robotics industry. The GRRC conducts research in autonomous ground vehicles and robots. The U.S. Army Tank Automotive Research, Development and Engineering Center (TARDEC) sponsors many GRRC projects.

TARDEC Director Dr. Grace M. Bochenek addressed the university deans and professors, industry, students and Michigan lawmakers and explained why the Robotics and Autonomous Technologies Conference is vital to the state and the Nation. "At TARDEC, our robotics platforms are bringing new capabilities, technologies and innovation to the warfighter," she commented. "Autonomous systems on the battlefield will change the way we fight. That's why today is so important to us. This gathering represents a strategic partnership with the University of Michigan, other universities and industry with us. The swell of innovation and intellectual capabilities here in Michigan are what we need to tap into."

The Detroit Arsenal Robotics Center of Excellence is the synergy for the research, development, engineering, acquisition, logistics and support for every one of the 5,000 robots that are in the theater today. TARDEC has three robotics programs in place: the Joint Center for Robotics, the Intelligent Ground Systems program and the Technical Program Manager for Unmanned Ground Vehicles. Co-located on the Detroit Arsenal is Program Executive Office Ground Combat Systems' Robotic Systems Joint Project Office (RS JPO). Project Manager COL James R. Braden leads RS JPO.

Braden asked the industry and academic leaders to focus their efforts on making plug-and-play sensors and finding new communication links because the robots operate on a radio frequency (RF) link and the RF spectrum is very crowded.

"I want to use robots out front to engage danger," Braden said. "And I want our young men and women warfighters to engage people."

Sen. Carl Levin (D-MI) echoed Braden's ideas for using robots to send into harm's way and thus, protect the men and women who put on the uniform. "I'm hopeful that the synergy that will develop between military and commercial interests and university and industry partnerships to make our future brighter in the U.S. and in the world," he proclaimed.

During a break, attendees spoke to university students who were displaying their robotic research results on "Robot Navigation and Pedestrian Avoidance," "Reliability and Failure in Unmanned Ground Vehicles" and "Autonomous Mobile Sensors" to name a few.

Rep. John Dingell (D-MI) also spoke at the conference. "A lot is riding on what you're doing today," he told the young researchers. "I've seen a remarkable display of skills and ability that are so important to the future of this state and our country. Our highly educated workforce will help this country increase its economic development and its standard of living."

Note: There are 4 photos that can be used with this release. Caption information follows. To download the photo, go to http://www.tardec.info/pressreleases/.

Photo Captions

TARDEC-PR-0819_Levin.jpg
From left, Sen. Carl Levin (D-MI), TARDEC Director Dr. Grace M. Bochenek and RS JPO Project Manager COL James R. Braden discussed the future of robotics during the Michigan Robotics and Autonomous Technologies Conference Aug. 11. (U.S. Army TARDEC photo by Elizabeth Carnegie.)

TARDEC-PR-0819_2_Munson.jpg
From left, University of Michigan Dean of Engineering David C. Munson Jr., Sen. Carl Levin (D-MI) and TARDEC Director Dr. Grace M. Bochenek tour the robotic research exhibits at the Aug. 11 Michigan Robotics and Autonomous Technologies Conference. U of M Professor of Electrical Engineering and Computer Science Jessy Grizzle (right) explains state-of-the-art robotic research programs. (U.S. Army TARDEC photo by Elizabeth Carnegie.)

TARDEC-PR-0819_3_irobot.jpg

Many industry members demonstrated their robotic platforms at the Michigan Robotics and Autonomous Technologies Conference Aug. 11. Shown here is an iRobot Warrior 700 lifting an inert 155mm artillery shell weighing slightly less than 100 pounds. (U.S. Army TARDEC photo by Elizabeth Carnegie.)

TARDEC-PR-0819_4_Brater.jpg
Foster-Miller, Inc. representive Bob Quinn (left) explains the TALON® robot to (from right) State Sen. Liz Brater, MI-District 18; TARDEC Director Dr. Grace M. Bochenek; TARDEC Joint Center for Robotics Director Dr. James Overholt; and Sen. Carl Levin at the University of Michigan College of Engineering's Michigan Robotics and Autonomous Technologies Conference, Aug. 11. (U.S. Army TARDEC photo by Elizabeth Carnegie.)

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TARDEC is the Nation's laboratory for advanced military ground systems and automotive technology. A leading technology integrator for the U.S. Army Materiel Command's Research Development and Engineering Command (RDECOM), TARDEC is headquartered at the Detroit Arsenal in Warren, MI, located in the heart of the world's automotive capitol. TARDEC is a major element of RDECOM and partner in the TACOM Life Cycle Management Command. As a full life-cycle engineering support provider-of-first-choice for all DOD ground combat and combat support weapons and vehicle systems, TARDEC develops and integrates the right technology solutions to improve Current Force effectiveness and provide superior capabilities for the Future Force. TARDEC's technical staff leads research in ground vehicle survivability; mobility/power and energy; robotics and intelligent systems; maneuver support and sustainment; and vehicle electronics and architecture. TARDEC develops and maintains ground vehicles for all U.S. Armed Forces and numerous federal agencies.

For additional information about TARDEC's forthcoming developments and other technologies, please contact Mike Roddin at mike.roddin@us.army.mil.